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ON LAGOCHILA, A NEW GENUS OF CATOSTOMOID FISHES.

BY DAVID S. JORDAN AND A. W. BRAYTON.

During a recent collecting tour in the Southern States the writers secured in the Chickamauga River, near Ringgold, Catoosa County, Georgia, a species of Sucker, new to science, which is believed to represent a new generic type. This genus, for which we suggest the name *Lagochila* (*lagocheilos*, having a hare-lip, in allusion to the peculiar mouth, and to the vernacular name of Hare-lip Sucker), bears somewhat the same relation to *Myxostoma*, and the other typical *Catostominæ*, that the genus *Exoglossum* bears to the typical *Leuciscinæ*.

Lagochila lacera, Jordan and Brayton, gen. and sp. nov.

Generic Characters.—Similar to *Myxostoma* (*Ptychostomus*, Agassiz) except in the structure of the mouth parts. Dorsal fin short; lateral line well developed; scales large, subequal; air-bladder in three parts; fontanelle between parietal bones well developed, pharyngeal bones weak, with numerous small teeth; upper lip not all protractile, greatly enlarged, finely plicate; lower lip longitudinally enlarged, but attenuated, and singular in form. It consists of two elongated and narrow lobes, separated by a narrow deep fissure, which extends inward to the edge of the mandible proper, which seems to be armed with a rather hard or almost horny plate, about as in the genus *Pantosteus*. The two lobes of the lip are weakly papillose. The lower lip is entirely separated from the upper at the angles by a deep fissure. Over this fissure the skin of the cheeks lies as a sort of cloak; the crease separating this skin from the mouth, extending up on the sides of the muzzle. The fissure between the lips extends down on the skin of the under side of the head. The opercle is extremely short, and the eye is entirely in the posterior part of the head.



Specific Characters.—Head rather short— $4\frac{2}{3}$ in length, conical, with lengthened snout, the region between the eyes flattened and

provided with prominent mucous ridges; cheeks and lower part of the head rather swollen; greatest length of opercle not more than that of eye. Eye medium, contained twice in snout, $4\frac{1}{3}$ in length of side of head.

Body rather elongate, not much elevated or compressed, the form being intermediate between that of *Myxostoma cervina* and that of *M. duquesnii*. Position and form of fins as usual in the genus *Myxostoma*, the dorsal rather short and not especially elevated, its free border rather more concave than usual.

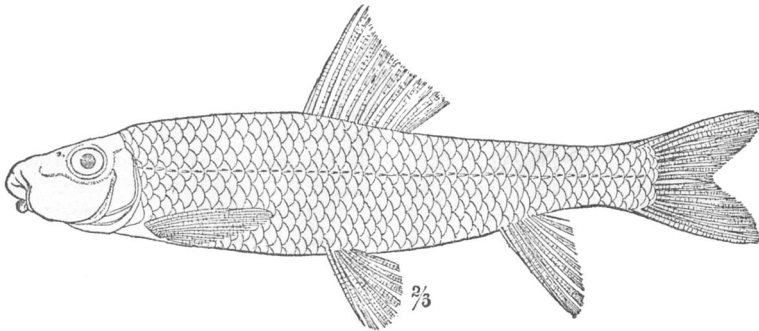
Fin rays: D. I. 12, A. I. 7, V. 9. Scales rather large, but little crowded forwards, 5-45-5. Lateral line very distinct, nearly straight.

Color somewhat olivaceous above, sides and belly more silvery; lower fins faintly orange.

Length of types respectively 10 and 4 and 3 inches.

Hab. Streams tributary to the southern bend of Tennessee River, in the States of Georgia, Tennessee, and Alabama. Fishermen tell us that this is the commonest and most valued species of sucker found in that region, and that it is everywhere known by the name of "Hare-lip Sucker," and sometimes of "Split-

Fig. 2.



mouth" or "Split-lip Sucker." It frequents rather deep waters, and is often taken with the hook. We obtained but two specimens in the Chickamauga, and one in Elk River at Estill Springs, in Tennessee. A minute examination of the bones of the head and jaws is desirable, but we have thought it best to defer it

until more specimens are obtained, not wishing to mutilate the original types.

The drawings accompanying this paper were made from the larger of the type specimens.

The genera of *Catostomidæ* may be thus compared :—

- * Body oblong or elongate, with a short, subquadrate dorsal fin of 10 to 17 developed rays.
- † Mouth singular; the upper lip not protractile, greatly enlarged; the lower lip developed as two separate lobes; the lower jaw provided with a sheath (*Lagochilinae*).
 - a. Air bladder in three parts; scales large, subequal; pharyngeal bones and teeth ordinary; fontanelle well-developed; lateral line present. LAGOCHILA, 1.
 - †† Mouth normal, the lower lip undivided, either tuberculate or plicate (*Catostominae*).
 - b. Air bladder in three parts; lateral line present; fontanelle present; scales large, subequal.
 - c. Pharyngeal bones very broad and strong; the lower 7 to 10 teeth on each side, greatly enlarged and truncate; the teeth on the upper part of the bone small, as usual in the family. PLACOPHARYNX, 2.
 - cc. Pharyngeal bones not especially enlarged; the teeth of the usual type. MYXOSTOMA, 3.
 - bb. Air bladder in two parts.
 - d. No lateral line; fontanelle present; lips plicate; no mandibular sheath; scales large. ERIMYZON, 4.
 - dd. Lateral line well developed; lips tuberculate.
 - e. Fontanelle distinct; no mandibular sheath.
 - f. Scales moderate, not crowded forwards, about equal over the body; body long and little compressed; head long and flattened, transversely concave between orbits; the physiognomy being therefore peculiar. HYPENTELIUM, 5.
 - ff. Scales small; smaller anteriorly and much crowded; head transversely convex between orbits. CATOSTOMUS, 6.
 - ee. Fontanelle obliterated by the union of the parietal bones; mandible with a cartilaginous sheath; scales small. PANTOSTEUS, 7.
- * Body much elongated, subcylindrical forwards; dorsal elongate, falciform, of 30 or more rays; fontanelle obliterated by the union of the parietal bones (*Cycleptinae*).
 - g. Mouth small, subinferior, with papillose lips; scales rather small. CYCLEPTUS, 8.

*** Body oblong oval, compressed; dorsal elongate, elevated in front, of 20 or more rays; fontanelle present (*Bubalichthyinæ*).

h. Dorsal rays about 30 in number (24 to 33); anal rays about ten (9 to 12); scales large.

i. Pharyngeal bones narrow, with the teeth relatively thin and weak.

j. Mouth small, inferior, protractile downwards; dorsal fin often greatly elevated.

CARPIODES, 9.

jj. Mouth larger, subterminal, protractile forwards (species of larger size, dusky colors, with lower dorsal).
 ICHTHYOBUS, 10.

ii. Pharyngeal bones strong; the teeth comparatively coarse and large, increasing in size downwards; dorsal fin moderately elevated; mouth inferior.

BUBALICHTHYS, 11.

hh. Dorsal fin with about 50 rays; anal 13; scales moderate; teeth as in *Bubalichthys* (?) (Asiatic species).
 MYXOCYPRINUS, 12.